

Claims:

1. A method of managing a telecommunications network, comprising:  
retrieving, through a management system, a current set of identifiers from a network device; and  
authenticating an identity of the network device using the current set of identifiers.
2. The method of claim 1, wherein the management system comprises a network management system (NMS).
3. The method of claim 1, wherein the management system comprises a command line interface.
4. The method of claim 1, wherein prior to retrieving, through a management system, a current set of identifiers from a network device, the method further comprises:  
connecting the management system to the network device using a network address assigned to the network device.
5. The method of claim 7, wherein the network address comprises an Internet Protocol (IP) address.
6. The method of claim 1, wherein prior to retrieving a current set of identifiers from a network device, the method further comprises:  
detecting a request to add the network device to the telecommunications network;  
retrieving an initial set of identifiers from the network device; and  
storing the initial set of identifiers in a storage unit accessible by the management system; and  
wherein authenticating an identity of the network device using the current set of identifiers comprises:  
comparing the retrieved current set of identifiers with the stored initial set of identifiers; and  
authenticating the identity of the network device if at least one of the retrieved current identifiers matches one of the stored initial identifiers.

7. The method of claim 6, wherein if the network device identity is authenticated, the method further comprises:  
    updating the stored initial set of identifiers with any of the retrieved current identifiers that do not match the stored initial identifiers.
8. The method of claim 6, further comprising:  
    posting a user notification indicating failed authentication if at least one of the retrieved current identifiers does not match one of the stored initial identifiers.
9. The method of claim 8, further comprising:  
    receiving a user authentication of the network device identity; and  
    replacing the stored initial set of identifiers with the retrieved current set of identifiers.
10. The method of claim 8, further comprising:  
    detecting a user supplied new network address for the network device; and  
    updating a record associated with the network device with the new network address.
11. The method of claim 6, wherein storing the initial set of identifiers comprises  
    adding the identifiers to an Administration Managed Device table in a management system data repository.
12. The method of claim 1, wherein prior to retrieving a current set of identifiers from a network device, the method further comprises:  
    detecting a request to add the network device to the telecommunications network;  
    retrieving an initial set of identifiers from the network device;  
    converting the initial set of identifiers into a first composite value; and  
    storing the first composite value in the storage unit accessible by the management system;  
    and  
    wherein authenticating an identity of the network device using the current set of identifiers comprises, for each retrieved identifier:

dividing the first composite value by one of the retrieved identifiers to form a division result;

converting the remaining retrieved identifiers into a second composite value;

comparing the division result to the second composite value; and

authenticating the identity of the network device if at least one of the division results matches one of the second composite values.

13. The method of claim 1, wherein the set of identifiers comprise physical identifiers.

14. The method of claim 1, wherein the set of identifiers comprise logical identifiers.

15. The method of claim 1, wherein the set of identifiers comprise physical and logical identifiers.

16. The method of claim 13, wherein the physical identifiers comprise Media Access Control (MAC) addresses.

17. The method of claim 13, wherein the network device includes an internal bus and wherein the physical identifiers comprise internal addresses used for communication over the internal bus.

18. The method of claim 17, wherein at least one of the physical identifiers comprises a MAC address.

19. The method of claim 13, wherein each of the physical identifiers is associated with a card within the network device.

20. The method of claim 19, wherein each of the physical identifiers comprises a serial number for the associated card.

21. The method of claim 20, wherein each of the physical identifiers further comprises a part number for the associated card.

22. The method of claim 1, wherein retrieving a current set of identifiers from the network device comprises:  
reading the current set of identifiers from a plurality of non-volatile memories located on a plurality of cards within the network device.

23. The method of claim 22, wherein the plurality of non-volatile memories comprise registers.

24. The method of claim 22, wherein the plurality of non-volatile memories comprise programmable read only memories (PROMs).

25. The method of claim 1, wherein the current set of identifiers comprises two identifiers.

26. The method of claim 1, wherein the current set of identifiers comprises more than two identifiers.

27. A method of managing a telecommunications network, comprising:  
detecting, through a management system, a user request to add a network device to the telecommunications network;  
retrieving a current set of identifiers from the network device;  
storing the initial set of identifiers in a storage unit accessible by the management system;  
detecting, through the management system, a user selection of the network device;  
retrieving a current set of identifiers from the network device; and  
authenticating the identity of the network device using both the retrieved current set of identifiers and the stored initial set of identifiers.

28. A method of managing a telecommunications network, comprising:  
connecting a management system to a network device using a network address assigned to the network device;  
retrieving a current set of identifiers from a network device; and  
authenticating an identity of the network device using the current set of identifiers.

29. A method of managing a telecommunications network, comprising:

- authenticating an identity of a network device using a current set of identifiers retrieved from the network device and a stored set of identifiers associated with the network device; and
- updating the stored set of identifiers when at least one but not all of the current identifiers match the stored identifiers.